/CB/

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NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	DEC 01	ChemPort single article sales feature unavailable
NEWS	3	JUN 01	CAS REGISTRY Source of Registration (SR) searching enhanced on STN
NEWS	4	JUN 26	NUTRACEUT and PHARMAML no longer updated
NEWS	5	JUN 29	IMSCOPROFILE now reloaded monthly
NEWS	6	JUN 29	EPFULL adds Simultaneous Left and Right Truncation (SLART) to AB, MCLM, and TI fields
NEWS	7	JUL 09	PATDPAFULL adds Simultaneous Left and Right Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS	8	JUL 14	USGENE enhances coverage of patent sequence location (PSL) data
NEWS	9	JUL 27	CA/CAplus enhanced with new citing references
NEWS	10	JUL 16	GBFULL adds patent backfile data to 1855
NEWS	11	JUL 21	USGENE adds bibliographic and sequence information
NEWS	12	JUL 28	EPFULL adds first-page images and applicant-cited references
NEWS	13	JUL 28	INPADOCDB and INPAFAMDB add Russian legal status data
NEWS	14	AUG 08	Improve STN by completing a survey and be entered to win a gift card
NEWS	15	AUG 10	Time limit for inactive STN sessions doubles to 40 minutes

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'HOME' ENTERED AT 13:12:34 ON 12 AUG 2009

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.22       0.22

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FILE COVERS 1907 - 12 Aug 2009  VOL 151 ISS 7
FILE LAST UPDATED: 11 Aug 2009  (20090811/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Jun 2009

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family
of databases have been updated to include new citing references
information.  This enhancement may impact record import into
database management software.  For additional information, refer
to NEWS 9.

=> s US20080242900/pn
L1           1 US20080242900/PN

=> d

L1   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2005:811729  CAPLUS
DN   143:213353
TI   Two-stage nitration method for producing dinitrotoluene from toluene
IN   Buettner, Johannes; MacKenroth, Wolfgang; Hermann, Heinrich; Konieczny,
     Peter; Gebauer, Juergen
PA   BASF Aktiengesellschaft, Germany
SO   PCT Int. Appl., 23 pp.
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     CODEN: PIXXD2
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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PI   WO 2005075407        A1    20050818    WO 2005-EP1017          20050202
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     DE 102004005913       A1    20050825    DE 2004-102004005913    20040205
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         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
     CN 1918109            A     20070221    CN 2005-80004228        20050202
     BR 2005007293         A     20070703    BR 2005-7293            20050202
     JP 2007520512         T     20070726    JP 2006-551789          20050202
     US 20080242900        A1    20081002    US 2006-586683          20060720 <--
     ZA 2006007374         A     20080625    ZA 2006-7374            20060904
     KR 2006130203         A     20061218    KR 2006-718074          20060905
     IN 2006CN03216        A     20070706    IN 2006-CN3216          20060905
PRAI DE 2004-102004005913 A     20040205
     WO 2005-EP1017        W     20050202
OS   CASREACT 143:213353
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> file reg
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                  ENTRY    SESSION
FULL ESTIMATED COST                                3.99       4.21

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STRUCTURE FILE UPDATES:   11 AUG 2009  HIGHEST RN 1173975-63-7
DICTIONARY FILE UPDATES:  11 AUG 2009  HIGHEST RN 1173975-63-7

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experimental property data in the original document. For information
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http://www.cas.org/support/stngen/stndoc/properties.html

=> tra l1 1- rn
L2 TRANSFER L1 1- RN : 8 TERMS
L3 8 L2

=> d l3

L3 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 25321-14-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, methyldinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, ar,ar-dinitro- (8CI)
OTHER NAMES:
CN Dinitrophenylmethane
CN Dinitrotoluene
CN Dinitrotoluol
CN DNT
CN Methyldinitrobenzene
DR 29656-15-3
MF C7 H6 N2 O4
CI IDS, COM
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS,
CASREACT, CBNB, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
DETHERM*, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,
PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL,
USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

D1—Me

2 [D1—NO_2]

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1137 REFERENCES IN FILE CA (1907 TO DATE)
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1142 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d l3 1-
YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 25321-14-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, methyldinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, ar,ar-dinitro- (8CI)
OTHER NAMES:
CN Dinitrophenylmethane
CN Dinitrotoluene
CN Dinitrotoluol
CN DNT
CN Methyldinitrobenzene
DR 29656-15-3
MF C7 H6 N2 O4
CI IDS, COM
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS,
      CASREACT, CBNB, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
      DETHERM*, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,
      PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL,
      USPATOLD
        (*File contains numerically searchable property data)
    Other Sources: DSL**, EINECS**, TSCA**
        (**Enter CHEMLIST File for up-to-date regulatory information)

D1—Me

2 [D1—NO_2]

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1137 REFERENCES IN FILE CA (1907 TO DATE)
  19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1142 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 7732-18-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Water (CA INDEX NAME)
OTHER NAMES:
CN Aquafina
CN Distilled water
CN DRiWATER
CN Hydrogen oxide (H2O)
CN NSC 147337
CN R 718
CN Spa
CN Ultrex II Ultrapure

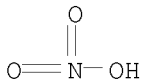
DR   558440-22-5, 558440-53-2
MF   H2 O
CI   COM
LC   STN Files: ANABSTR, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CSCHEM, CSNB, DETHERM*,
       EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
       PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)

H_2O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

          439590 REFERENCES IN FILE CA (1907 TO DATE)
            1547 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
          441011 REFERENCES IN FILE CAPLUS (1907 TO DATE)

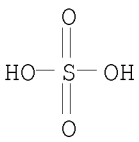
L3   ANSWER 3 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN   7697-37-2 REGISTRY
ED   Entered STN: 16 Nov 1984
CN   Nitric acid (CA INDEX NAME)
OTHER NAMES:
CN   Aqua fortis
CN   Azotic acid
CN   Fumic acid
CN   Hydrogen nitrate
CN   Nital
CN   Nitric acid (HONO2)
CN   Nitryl hydroxide
CN   NSC 147791
CN   NSC 15203
DR   802862-59-5, 1053657-18-3, 78989-43-2, 218625-70-8
MF   H N O3
CI   COM
LC   STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA,
       CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST,
       CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT,
       ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT,
       IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, PS, RTECS*,
       TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

           66579 REFERENCES IN FILE CA (1907 TO DATE)
            2412 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           66859 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 7664-93-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN Sulfuric acid (CA INDEX NAME)
OTHER NAMES:
CN BOV
CN Brimstone acid
CN Contact acid
CN Dihydrogen sulfate
CN Dipping acid
CN NSC 248648
CN NSC 38965
CN Oil of vitriol
CN Ridolene 123
CN Sulphuric acid
CN Vitriol brown oil
DR 127529-01-5, 119540-51-1, 140623-70-7
MF H2 O4 S
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

130341 REFERENCES IN FILE CA (1907 TO DATE)
5882 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
130875 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 1321-12-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, methylnitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, ar-nitro- (8CI)
OTHER NAMES:
CN Methylnitrobenzene
CN Mononitrotoluene
CN Nitrophenylmethane
CN Nitrotoluene
MF C7 H7 N O2
CI IDS, COM
LC STN Files: AGRICOLA, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,

PROMT, RTECS*, TOXCENTER, TULSA, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

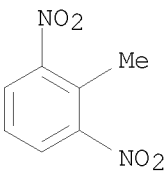
D1—Me

D1—NO_2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

584 REFERENCES IN FILE CA (1907 TO DATE)
13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
586 REFERENCES IN FILE CAPLUS (1907 TO DATE)

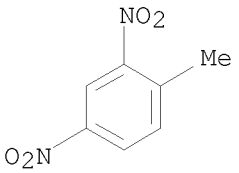
L3 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 606-20-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, 2-methyl-1,3-dinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, 2,6-dinitro- (8CI)
OTHER NAMES:
CN 1-Methyl-2,6-dinitrobenzene
CN 2,6-Dinitrotoluene
CN 2,6-DNT
CN 2-Methyl-1,3-dinitrobenzene
MF C7 H6 N2 O4
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1613 REFERENCES IN FILE CA (1907 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1621 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 121-14-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, 1-methyl-2,4-dinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, 2,4-dinitro- (8CI)
OTHER NAMES:
CN 1-Methyl-2,4-dinitrobenzene
CN 2,4-Dinitrotoluene
CN 2,4-DNT
CN 4-Methyl-1,3-dinitrobenzene
CN 6-Methyl-1,3-dinitrobenzene
CN NSC 7194
MF C7 H6 N2 O4
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

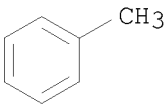


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3327 REFERENCES IN FILE CA (1907 TO DATE)
37 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3338 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2009 ACS on STN
RN 108-88-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, methyl- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene (8CI)
OTHER NAMES:
CN 1-Methylbenzene
CN Antisal 1a
CN CP 25
CN CP 25 (solvent)
CN Methacide
CN Methylbenzene
CN Methylbenzol
CN NSC 406333
CN Phenylmethane
CN Toluol
DR 1053657-77-4

MF C7 H8
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU
      (*File contains numerically searchable property data)
    Other Sources: DSL**, EINECS**, TSCA**
      (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

103723 REFERENCES IN FILE CA (1907 TO DATE)
1029 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
104117 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	20.85	40.64

FILE 'CAPLUS' ENTERED AT 13:16:12 ON 12 AUG 2009

FILE COVERS 1907 - 12 Aug 2009 VOL 151 ISS 7
FILE LAST UPDATED: 11 Aug 2009 (20090811/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate

substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.50 41.14

FILE 'REGISTRY' ENTERED AT 13:16:19 ON 12 AUG 2009
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STRUCTURE FILE UPDATES: 11 AUG 2009 HIGHEST RN 1173975-63-7
DICTIONARY FILE UPDATES: 11 AUG 2009 HIGHEST RN 1173975-63-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d his

(FILE 'HOME' ENTERED AT 13:12:34 ON 12 AUG 2009)

FILE 'CAPLUS' ENTERED AT 13:12:49 ON 12 AUG 2009
L1 1 S US20080242900/PN

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FILE 'CAPLUS' ENTERED AT 13:13:18 ON 12 AUG 2009
L2 TRA L1 1- RN : 8 TERMS

FILE 'REGISTRY' ENTERED AT 13:13:18 ON 12 AUG 2009
L3 8 SEA L2

FILE 'CAPLUS' ENTERED AT 13:16:12 ON 12 AUG 2009

FILE 'REGISTRY' ENTERED AT 13:16:19 ON 12 AUG 2009

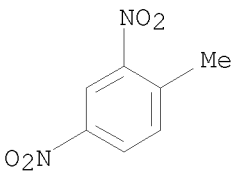
=> s 121-14-3
L4 0 121-14-3

=> s 121-14-2
L5 1 121-14-2

(121-14-2/RN)

=> d

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 121-14-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, 1-methyl-2,4-dinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, 2,4-dinitro- (8CI)
OTHER NAMES:
CN 1-Methyl-2,4-dinitrobenzene
CN 2,4-Dinitrotoluene
CN 2,4-DNT
CN 4-Methyl-1,3-dinitrobenzene
CN 6-Methyl-1,3-dinitrobenzene
CN NSC 7194
MF C7 H6 N2 O4
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

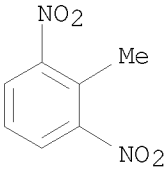
3327 REFERENCES IN FILE CA (1907 TO DATE)
37 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3338 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 606-20-2
L6 1 606-20-2
(606-20-2/RN)

=> d

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 606-20-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, 2-methyl-1,3-dinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, 2,6-dinitro- (8CI)
OTHER NAMES:
CN 1-Methyl-2,6-dinitrobenzene
CN 2,6-Dinitrotoluene
CN 2,6-DNT
CN 2-Methyl-1,3-dinitrobenzene

MF   C7 H6 N2 O4
CI   COM
LC   STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
       CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN,
       CSCHEM, CSNB, DETHERM*, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE,
       MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2,
       USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

            1613 REFERENCES IN FILE CA (1907 TO DATE)
              21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1621 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 25321-14-6
L7   1 25321-14-6
                (25321-14-6/RN)

=> d

L7   ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN   25321-14-6 REGISTRY
ED   Entered STN: 16 Nov 1984
CN   Benzene, methyldinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Toluene, ar,ar-dinitro- (8CI)
OTHER NAMES:
CN   Dinitrophenylmethane
CN   Dinitrotoluene
CN   Dinitrotoluol
CN   DNT
CN   Methyldinitrobenzene
DR   29656-15-3
MF   C7 H6 N2 O4
CI   IDS, COM
LC   STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS,
       CASREACT, CBNB, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
       DETHERM*, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,
       PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL,
       USPATOLD
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)

D1—Me

2 [D1—NO_2]

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1137 REFERENCES IN FILE CA (1907 TO DATE)
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1142 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 1321-12-6
L8 1 1321-12-6
(1321-12-6/RN)

=> d

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 1321-12-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, methylnitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, ar-nitro- (8CI)
OTHER NAMES:
CN Methylnitrobenzene
CN Mononitrotoluene
CN Nitrophenylmethane
CN Nitrotoluene
MF C7 H7 N O2
CI IDS, COM
LC STN Files: AGRICOLA, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, RTECS*, TOXCENTER, TULSA, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

D1— Me

D1— NO_2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

584 REFERENCES IN FILE CA (1907 TO DATE)
13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
586 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	14.51	55.65

FILE 'CAPLUS' ENTERED AT 13:17:37 ON 12 AUG 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 12 Aug 2009 VOL 151 ISS 7
FILE LAST UPDATED: 11 Aug 2009 (20090811/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer

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to NEWS 9.

=> d his

     (FILE 'HOME' ENTERED AT 13:12:34 ON 12 AUG 2009)

     FILE 'CAPLUS' ENTERED AT 13:12:49 ON 12 AUG 2009
L1            1 S US20080242900/PN

     FILE 'REGISTRY' ENTERED AT 13:13:10 ON 12 AUG 2009

     FILE 'CAPLUS' ENTERED AT 13:13:18 ON 12 AUG 2009
L2              TRA L1 1- RN :        8 TERMS

     FILE 'REGISTRY' ENTERED AT 13:13:18 ON 12 AUG 2009
L3            8 SEA L2

     FILE 'CAPLUS' ENTERED AT 13:16:12 ON 12 AUG 2009

     FILE 'REGISTRY' ENTERED AT 13:16:19 ON 12 AUG 2009
L4            0 S 121-14-3
L5            1 S 121-14-2
L6            1 S 606-20-2
L7            1 S 25321-14-6
L8            1 S 1321-12-6

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 12 AUG 2009

=> s l5/prep
          3338 L5
       4826579 PREP/RL
L9          209 L5/PREP
                (L5 (L) PREP/RL)

=> s l6/prep
          1621 L6
       4826579 PREP/RL
L10         123 L6/PREP
                (L6 (L) PREP/RL)

=> s l7/prep
          1142 L7
       4826579 PREP/RL
L11         151 L7/PREP
                (L7 (L) PREP/RL)

=> s l9 or l10 or l11
L12         368 L9 OR L10 OR L11

=> dup remov
ENTER L# LIST OR (END):l12
PROCESSING COMPLETED FOR L12
L13          368 DUP REMOV L12 (0 DUPLICATES REMOVED)

=> s l13 and l7
L14         368 S L13
           1142 L7
L15         153 L14 AND L7

=> s l15 and nitric
        225568 NITRIC
             3 NITRICS
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        225571 NITRIC
                  (NITRIC OR NITRICS)
L16          49 L15 AND NITRIC

=> l16 and sulfuric
L16 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l16 and sulfuric
        176270 SULFURIC
         16194 SULPHURIC
        190261 SULFURIC
                  (SULFURIC OR SULPHURIC)
L17          32 L16 AND SULFURIC

=> s l17 and py<=2005
      26321242 PY<=2005
L18          24 L17 AND PY<=2005

=> d l18 abs ibib hitstr 1-
YOU HAVE REQUESTED DATA FROM 24 ANSWERS - CONTINUE? Y/(N):y

L18  ANSWER 1 OF 24  CAPLUS  COPYRIGHT 2009 ACS on STN
AB   A method for producing dinitrotoluene comprises: (A) the nitration of
     toluene with nitric acid in the presence of sulfuric
     acid to give nitrotoluene; (B) separating the reaction product of step (A) into
     a nitrotoluene-containing organic phase and a sulfuric acid-containing aqueous
     phase; (C) nitrating the nitrotoluene-containing organic phase with
     nitric acid in the presence of sulfuric acid to give
     dinitrotoluene; and (D) separating the reaction product of step (C) into a
     dinitrotoluene-containing organic phase and a sulfuric-acid containing aqueous
     phase.  The reaction product of step (A) contains 3.0-8% of toluene, in
     relation to the organic phase, and 0.1-1.2% of nitric acid, in
     relation to the aqueous phase and the phase separation of step (B) is carried
out
     in such a manner that further reaction of toluene with nitric
     acid is prevented.  Process flow diagrams are presented.
ACCESSION NUMBER:        2005:811729  CAPLUS
DOCUMENT NUMBER:         143:213353
TITLE:                   Two-stage nitration method for producing
                         dinitrotoluene from toluene
INVENTOR(S):             Buettner, Johannes; MacKenroth, Wolfgang; Hermann,
                         Heinrich; Konieczny, Peter; Gebauer, Juergen
PATENT ASSIGNEE(S):      BASF Aktiengesellschaft, Germany
SOURCE:                  PCT Int. Appl., 23 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                German
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     WO 2005075407        A1    20050818    WO 2005-EP1017         20050202 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 102004005913	A1	20050825	DE 2004-102004005913	20040205 <--
EP 1713756	A1	20061025	EP 2005-701305	20050202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1918109	A	20070221	CN 2005-80004228	20050202
BR 2005007293	A	20070703	BR 2005-7293	20050202
JP 2007520512	T	20070726	JP 2006-551789	20050202
US 20080242900	A1	20081002	US 2006-586683	20060720
ZA 2006007374	A	20080625	ZA 2006-7374	20060904
KR 2006130203	A	20061218	KR 2006-718074	20060905
IN 2006CN03216	A	20070706	IN 2006-CN3216	20060905
PRIORITY APPLN. INFO.:			DE 2004-102004005913A	20040205
			WO 2005-EP1017 W	20050202

OTHER SOURCE(S): CASREACT 143:213353

IT 25321-14-6P, Dinitrotoluene
RL: EPR (Engineering process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
(two-stage nitration method for producing dinitrotoluene from toluene)

RN 25321-14-6 CAPLUS

CN Benzene, methyldinitro- (CA INDEX NAME)

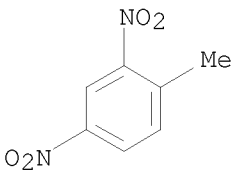
D1—Me

2 [D1—NO_2]

IT 121-14-2P, 2,4-Dinitrotoluene 606-20-2P, 2,6-Dinitrotoluene
RL: SPN (Synthetic preparation); PREP (Preparation)
(two-stage nitration method for producing dinitrotoluene from toluene)

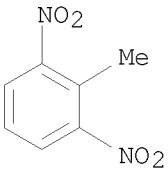
RN 121-14-2 CAPLUS

CN Benzene, 1-methyl-2,4-dinitro- (CA INDEX NAME)



RN 606-20-2 CAPLUS

CN Benzene, 2-methyl-1,3-dinitro- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB The present invention relates to a process for working up or treating aqueous wastewater which are formed during the nitration of toluene to dinitrotoluene with nitrating acid. These aqueous wastewater containing acidic wash water and alkaline wash water from the dinitrotoluene washing step, and distillate from the sulfuric acid concentration step. The process comprises: (1) combining the acidic and alkaline wastewater from the washing step and the aqueous distillate from the sulfuric acid concentration step such that the resulting mixture has a pH below 5; (2) separating the aqueous and organic phases which are formed by phase separation; (3) subjecting the aqueous phase from (2) to an extraction step; (4) extracting the organic components contained in the aqueous phase from (3) with toluene; and (5) introducing the toluene phase enriched with the organic components into the toluene nitration.
ACCESSION NUMBER: 2005:786 CAPLUS
DOCUMENT NUMBER: 142:99610
TITLE: Process for working up the waste water obtained in the preparation of dinitrotoluene
INVENTOR(S): Munnig, Jurgen; Wastian, Dietmar; Lorenz, Wolfgang; Keggenhoff, Berthold
PATENT ASSIGNEE(S): Bayer Materialscience AG, Germany
SOURCE: U.S. Pat. Appl. Publ., 6 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040262238	A1	20041230	US 2004-878211	20040628 <--
US 6936741	B2	20050830		
DE 10329304	A1	20050203	DE 2003-10329304	20030630 <--
EP 1496043	A1	20050112	EP 2004-14227	20040617 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
KR 2005002620	A	20050107	KR 2004-49538	20040629 <--
CN 1576236	A	20050209	CN 2004-10063301	20040629 <--
CN 1285514	C	20061122		
JP 2005021890	A	20050127	JP 2004-194525	20040630 <--

PRIORITY APPLN. INFO.: DE 2003-10329304 A 20030630
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PREP (Preparation)
(process for working up wastewater obtained in preparation of dinitrotoluene)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB Aromatic amines are produced from aromatic hydrocarbons by (a) reacting the aromatic hydrocarbon(s) with a mixture of nitric acid and sulfuric acid to generate a two-phase reaction mixture, (b) separating the reaction mixture into an aqueous acid phase and an organic phase containing the nitroarom. compds., (c) washing the organic phase to purify the nitroarom. compound(s), (d) hydrogenating the nitroarom. compound(s) in the presence of a catalyst to produce the aromatic amine(s) and water of reaction, and (e) separating the water of reaction formed in step (d) from the aromatic amine(s), in which the water of reaction separated in step (e) is used to wash the organic phase containing the nitroarom. compds. in step (c). The object of the present invention is, therefore, to decrease the amount of waste water produced during the preparation of aromatic amines and to increase the economic viability of the aromatic amine preparation process. Surprisingly, it has been found that water with a considerable concentration of aromatic amine(s) of up to 1000 ppm or more, can be used without any problem to wash the corresponding crude nitroarom. compound(s) without impairing either the nitration process or the subsequent hydrogenation reaction to produce the aromatic amine(s).
ACCESSION NUMBER: 2004:1054276 CAPLUS
DOCUMENT NUMBER: 142:40423
TITLE: Process for preparing aromatic amines
INVENTOR(S): Keggenhoff, Berthold; Sittkus, Karl Rudolf; Mueller, Claudia; Zervoudis, Demetrios N.
PATENT ASSIGNEE(S): Bayer Materialscience A.-G., Germany; Bayer Materialscience LLC
SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1484312	A1	20041208	EP 2004-12192	20040524 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				

US 20040249213	A1	20041209	US 2003-454332		20030604 <--
US 7122701	B2	20061017			
JP 2004359685	A	20041224	JP 2004-164787		20040602 <--
CN 1572784	A	20050202	CN 2004-10048867		20040602 <--
KR 2004104926	A	20041213	KR 2004-40281		20040603 <--

PRIORITY APPLN. INFO.: US 2003-454332 A 20030604

IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(process for preparing aromatic amines with reduced waste water release)

RN 25321-14-6 CAPLUS

CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN

AB A procedure is described for the preparation of dinitrotoluene by a two-stage nitration of toluene in which: (A) in a first stage toluene is adiabatically nitratd with nitric acid and the toluene is nitrated to ≥90% and where ≤50% of the assigned toluene is converted into dinitrotoluene, subsequently the mono nitrotoluene-containing organic phase and the aqueous sulfuric acid-containing acid phase are separated, the aqueous sulfuric acid-containing acid phase is subjected to flash evaporation, concentrated, and the concentrated sulfuric acid recoved is lead back into the reaction of the first stage and/or the reaction of the second stage; and isothermally completely converts (b) in a second stage the mononitrotoluene-containing organic phase from the first stage with nitrating acid and the aqueous sulfuric acid-containing acid phase is separated by vacuum evaporation, concentrated, and the recovered concentrated sulfuric acid is recycled to the first stage and/or the second stage. Process flow diagrams are presented.

ACCESSION NUMBER: 2004:738349 CAPLUS
DOCUMENT NUMBER: 141:245230
TITLE: Two-stage nitration process for the production of dinitrotoluene from toluene
INVENTOR(S): Dieterich, Erwin; Hielscher, Anke; Keggenhoff, Berthold; Keller-Killewald, Manfred; Muennig, Juergen; Wastian, Dietmar
PATENT ASSIGNEE(S): Bayer Ag, Germany
SOURCE: Ger. Offen., 13 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10307140	A1	20040909	DE 2003-10307140	20030220 <--
EP 1508563	A1	20050223	EP 2004-2754	20040207 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 20040267061	A1	20041230	US 2004-780266	20040217 <--
US 6984762	B2	20060110		
KR 2004075751	A	20040830	KR 2004-10981	20040219 <--
JP 2004250452	A	20040909	JP 2004-43476	20040219 <--
RU 2330836	C2	20080810	RU 2004-104740	20040219
CN 1523006	A	20040825	CN 2004-10006845	20040220 <--
CN 100343224	C	20071017		

PRIORITY APPLN. INFO.: DE 2003-10307140 A 20030220
OTHER SOURCE(S): CASREACT 141:245230
IT 25321-14-6P, Dinitrotoluene
RL: EPR (Engineering process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
(two-stage nitration process for the production of dinitrotoluene from toluene)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L18 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB An improvement in a process for the production of dinitrotoluene and particularly to the recovery of dinitrotoluene and organic byproducts from the wastewater and wash waters generated in the process is reported. Wastewater and wash water streams contaminated with residual levels of mononitrotoluene, dinitrotoluene, and organic byproducts, formed in the purification process, are contacted with toluene. An organic phase and an aqueous phase are generated. The phases are separated and the dinitrotoluene recovered from the organic phase; process flow diagrams are presented.
ACCESSION NUMBER: 2003:35387 CAPLUS
DOCUMENT NUMBER: 138:91814
TITLE: Toluene extraction of dinitrotoluene wash water
INVENTOR(S): Sawicki, John Edward
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6506948	B1	20030114	US 2002-72217	20020207 <--

PRIORITY APPLN. INFO.: US 2002-72217 20020207
IT 25321-14-6P, Dinitrotoluene
RL: EPR (Engineering process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
(toluene extraction of dinitrotoluene wash water)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB A continuous, isothermal process for the preparation of mononitrotoluenes in the presence of phosphoric acid using sulfuric and aqueous nitric acid is described.
ACCESSION NUMBER: 2002:773663 CAPLUS
DOCUMENT NUMBER: 137:281030
TITLE: Continuous isothermal process for the preparation of mononitrotoluene in the presence of phosphoric acid
INVENTOR(S): Gotta, Matthias; Demuth, Ralf; Zirngiebl, Eberhard; Weber, Hans-Martin; Ronge, Georg
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany; Bayer Chemicals AG
SOURCE: Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1247798	A1	20021009	EP 2002-6614	20020325 <--
EP 1247798	B1	20040602		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10117207	C1	20021114	DE 2001-10117207	20010406 <--
IN 2002MU00269	A	20051118	IN 2002-MU269	20020321 <--

AT 268321	T	20040615	AT 2002-6614		20020325 <--
US 20020147372	A1	20021010	US 2002-114288		20020402 <--
US 6768032	B2	20040727			
CA 2380159	A1	20021006	CA 2002-2380159		20020403 <--
JP 2002338529	A	20021127	JP 2002-101189		20020403 <--
JP 4257893	B2	20090422			
KR 869014	B1	20081117	KR 2002-18489		20020404
CN 1380283	A	20021120	CN 2002-105465		20020405 <--
CN 1219745	C	20050921			
RU 2293722	C2	20070220	RU 2002-108673		20020405
HK 1051180	A1	20060512	HK 2003-103447		20030515

PRIORITY APPLN. INFO.: DE 2001-10117207 A 20010406

IT 25321-14-6P, Dinitrotoluene
RL: BYP (Byproduct); PREP (Preparation)
(in a continuous isothermal process for the preparation of mononitrotoluene in the presence of phosphoric acid)

RN 25321-14-6 CAPLUS

CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN

AB A stripping and neutralization process for minimization of wastewater in the nitration manufacture of dinitrotoluene from toluene is described and process flow diagrams are presented.

ACCESSION NUMBER: 2002:632480 CAPLUS

DOCUMENT NUMBER: 137:171386

TITLE: Stripping and neutralization process for minimization of wastewater in the nitration manufacture of dinitrotoluene from toluene

INVENTOR(S): Plinke, Guenter; Winterbauer, Hansjuergen

PATENT ASSIGNEE(S): Plinke G.m.b.H., Germany

SOURCE: Ger., 8 pp.
CODEN: GWXXAW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10143800	C1	20020822	DE 2001-10143800	20010906 <--

PRIORITY APPLN. INFO.: DE 2001-10143800 20010906

IT 25321-14-6P, Dinitrotoluene

RL: EPR (Engineering process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PYP (Physical process); PREP (Preparation); PROC (Process)
(stripping and neutralization process for minimization of wastewater in the nitration manufacture of dinitrotoluene from toluene)

RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB An integrated process for treating alkaline wash water effluent from nitroarom. (e.g., nitrobenzene) manufacture, principally containing nitro-hydroxy-aromatic compds. is described. The integrated process concs. the alkaline wash water to recover chems. and water prior to treating the concentrate through supercrit. water oxidation The supercrit. water oxidation step
consists of treating the concentrate in the presence of an oxygen source at conditions, which are supercrit. for water to cause a substantial portion of the organic component of the concentrate to oxidize. The product effluent includes a gaseous component and a clean water component, and in the event that insol. ash is formed, an ash component. The new integrated process results in reduced chemical and water consumption compared to existing processes. In addition, the treated wash water effluent can be recycled to process or directly discharged.

ACCESSION NUMBER: 2001:668367 CAPLUS
DOCUMENT NUMBER: 135:228504
TITLE: Integrated effluent treatment process for nitroaromatic manufacture
INVENTOR(S): Boyd, David Anthony; Gairns, Stuart Alan; Guenkel, Alfred Alexander
PATENT ASSIGNEE(S): Noram Engineering and Constructors Ltd., Can.
SOURCE: U.S., 15 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6288289	B1	20010911	US 2000-492851	20000127 <--
EP 1132347	A2	20010912	EP 2001-101845	20010126 <--
EP 1132347	A3	20010926		

EP 1132347 B1 20050928
EP 1132347 B2 20090318
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 2000-492851 A 20000127
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP (Preparation)
(in an integrated effluent treatment process for nitroarom. manufacture)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB In view of problems of low heat efficiency and environmental pollution problems during spent acid concentration, the spent waste acid from mononitrotoluene (MNT) was to be concentrated to 72%-77% at 140-160° and 200-300 mm Hg. The concentrated sulfuric acid could be used directly in the nitrating plant. It features simplicity in operation, satisfied results in practice observed
ACCESSION NUMBER: 2000:774606 CAPLUS
DOCUMENT NUMBER: 134:268036
TITLE: Study on the cycling utilization of disposed spent acid of mono-nitrotoluene
AUTHOR(S): Dong, Yun; Cui, Yingxiang; Bao, Yiguo; Yang, Hui
CORPORATE SOURCE: Jiangsu Huaihua Group Co., Ltd., Xuyi, 211742, Peop. Rep. China
SOURCE: Ranliao Gongye (2000), 37(3), 33-35
CODEN: RAGOFS; ISSN: 1006-6632
PUBLISHER: Huagongbu Shenyang Huagong Yanjiuyuan
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
IT 25321-14-6P, Dinitrotoluene
RL: BYP (Byproduct); PREP (Preparation)
(in cycling waste acid of mono-nitrotoluene manufacture)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1— Me

2 [D1— NO_2]

L18 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN

AB The nitration of aromatic compds. is achieved in high yield and selectivity by using oxygen activated by an inorg. catalyst and nitrogen dioxide. Since this process uses neither concentrated nitric nor sulfuric acids, the generation of spent waste acid does not occur. Furthermore, the process does not encounter the problem of high costs associated with the generation of ozone as in an alternative nitration process. Since the solubility of oxygen in a reaction medium is increased by using pressurized oxygen, nitrogen dioxide is activated by a porous inorg. oxide catalyst (e.g., silica) and thus an aromatic compound (e.g., benzene) is nitrated into a nitro compound (e.g., PhNO2), the reaction rate is significantly increased, and the recovery of reactants is easy due to the insoly. of the catalyst.

ACCESSION NUMBER: 1999:549245 CAPLUS
DOCUMENT NUMBER: 131:157644
TITLE: Process and catalysts for the nitration of aromatic compounds using oxygen and nitrogen dioxide
INVENTOR(S): Lee, Bon-Su; Chung, Kyoo-Hyun; Lee, Yoon-Sik; Kim, Young-Gyu
PATENT ASSIGNEE(S): Inha University Foundation, S. Korea
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9942433	A1	19990826	WO 1998-KR285		19980918 <--
W: JP, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
EP 1062198	A1	20001227	EP 1998-944327		19980918 <--
EP 1062198	B1	20030604			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2002503716	T	20020205	JP 2000-532386		19980918 <--
AT 242196	T	20030615	AT 1998-944327		19980918 <--
US 6291726	B1	20010918	US 2000-622285		20001018 <--
PRIORITY APPLN. INFO.:			KR 1998-5014	A	19980218
			WO 1998-KR285	W	19980918

OTHER SOURCE(S): CASREACT 131:157644
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(catalysts for the conversion of aromatic compds. using a oxygen and nitrogen dioxide into nitroaroms.)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB The pollution source in nitrotoluene production was introduced, approaches for reducing the pollution were discussed. The waste gas emitted from the nitration process mainly contained NO and NO2, the waste acid from the nitration process mainly contained H2SO4 68-71, HNO3 1-2, and nitration product 0.4-0.6%. The wastewater from the after-treatment of nitrotoluene contained nitrotoluene, NaOH, Na2SO4, and phenol. Tar from rectification process contained 19-23% dinitrotoluene and 77-81% nitrotoluene. Measures for reuse of the waste acid and recovery of nitrotoluene from the tar were introduced. The waste gas was absorbed with Na2CO3, and formed byproduct nitrate. The toxic wastewater was extracted and recovered (or incinerated), the phenol containing wastewater was treated by biol. treatment method.
ACCESSION NUMBER: 1999:464437 CAPLUS
DOCUMENT NUMBER: 131:189010
TITLE: Pollution control technology in nitrotoluene production
AUTHOR(S): Dong, Yun
CORPORATE SOURCE: Jiangsu Huaihe Chemical Plant, Yuyi, 211742, Peop. Rep. China
SOURCE: Huagong Huanbao (1999), 19(3), 172-175
CODEN: HUHUFD; ISSN: 1006-1878
PUBLISHER: Huagong Huanbao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
IT 25321-14-6P, DiNitrotoluene
RL: POL (Pollutant); PUR (Purification or recovery); REM (Removal or disposal); OCCU (Occurrence); PREP (Preparation); PROC (Process)
(removal from tar; pollution control technol. in nitrotoluene manufacturing)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

L18 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN

AB A process is presented for the production of dinitrotoluene, a TDI intermediate (no data), using a feed sulfuric acid, referred to as weak acid, as the feed sulfuric acid for the nitration facility. The weak acid feed concentration is 86-91%, preferably 87-89%, to meet the total sulfuric acid requirements for the facility. This is accomplished by utilizing cocurrent processing in a mononitration zone and countercurrent nitration with respect to sulfuric acid in the dinitration zone. Process flow diagrams are presented.

ACCESSION NUMBER: 1999:209138 CAPLUS
DOCUMENT NUMBER: 130:239145
TITLE: Continuous nitration process for producing dinitrotoluene from toluene with nitric and sulfuric acids
INVENTOR(S): Mazzafro, William Joseph; Clarke, Stephen Ian; Simpson, Mark Shedric; Van Court, Carr Richard
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., USA
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 903336	A2	19990324	EP 1998-117490	19980915 <--
EP 903336	A3	20010425		
EP 903336	B1	20030521		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 5902910	A	19990511	US 1997-933706	19970919 <--
BR 9803446	A	19991214	BR 1998-3446	19980914 <--
PT 903336	T	20030930	PT 1998-117490	19980915 <--
ES 2196446	T3	20031216	ES 1998-117490	19980915 <--
CN 1216760	A	19990519	CN 1998-119555	19980919 <--
CN 1157362	C	20040714		

PRIORITY APPLN. INFO.: US 1997-933706 A 19970919

IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PREP (Preparation)
(continuous nitration process for producing dinitrotoluene from toluene with nitric and sulfuric acids)

RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L18 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB Crude dinitrotoluene from nitration of toluene or mononitrotoluene, after separation of nitrating acid, is extracted with a countercurrent stream of dilute aqueous solution of HNO3, H2SO4 and HNO2 in a multistage process where the volume ratio of dinitrotoluene to aqueous solution is 1:3 to 10:1, and the aqueous extract is recycled to the nitrating process, directly or after concentration (e.g., to 65% HNO3). Approx. 98% of the HNO3 and HNO2 in the crude dinitrotoluene are removed.
ACCESSION NUMBER: 1996:676109 CAPLUS
DOCUMENT NUMBER: 125:304516
ORIGINAL REFERENCE NO.: 125:56913a,56916a
TITLE: Nitric acid, sulfuric acid and nitrous acid removal, recovery and recycling in nitrating of toluene or mononitrotoluene
INVENTOR(S): Hermann, Heinrich; Gebauer, Juergen
PATENT ASSIGNEE(S): Josef Meissner Gmbh & Co., Germany
SOURCE: Eur. Pat. Appl., 6 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 736514	A1	19961009	EP 1996-104233	19960316 <--
EP 736514	B1	20010620		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, PT, SE				
DE 19512114	A1	19961010	DE 1995-19512114	19950404 <--
DE 19512114	C2	20000427		
US 5756867	A	19980526	US 1995-529100	19950915 <--
AT 202333	T	20010715	AT 1996-104233	19960316 <--
IN 187139	A1	20020209	IN 1996-CA475	19960318 <--
CA 2173381	A1	19961005	CA 1996-2173381	19960403 <--
CA 2173381	C	20070626		
CN 1145893	A	19970326	CN 1996-105960	19960403 <--
CN 1085656	C	20020529		
PL 187688	B1	20040930	PL 1996-313631	19960404 <--

PRIORITY APPLN. INFO.: DE 1995-19512114 A 19950404
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PUR (Purification or recovery);

PREP (Preparation)
(nitric acid, sulfuric acid and nitrous acid removal, recovery and recycling in nitrating of toluene or mononitrotoluene)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L18 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB Aromatic compds. (e.g., PhMe) are continuously dinitrated with a nitronium ion-containing solution (e.g., aqueous mixts. of HNO3 and H2SO4) by: (a) conducting the dinitration in an emulsion reaction mixture; (b) using 1.3-3.5 mol HNO3 (in the form of a nitronium ion-containing solution) per mol aromatic compound; (c) maintaining the dispersion from coalescence through the use of multiple dispersions; (d) the first dispersion of the liquid stream is ≥1 s for manufacture of the emulsion; and (e) ≥20% of the total HNO3 is added to the first dispersion. A process flow diagram and reactor schematic is presented.

ACCESSION NUMBER: 1996:345384 CAPLUS
DOCUMENT NUMBER: 125:10357
ORIGINAL REFERENCE NO.: 125:2281a,2284a
TITLE: Continuous method for the dinitration of aromatic compounds
INVENTOR(S): Pirkl, Hans-Georg; Schomaecker, Reinhard; Klingler, Uwe; Schieb, Thomas; Wiechers, Gerhard; Zimmermann, Juergen
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 13 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4437047	A1	19960418	DE 1994-4437047	19941017 <--
EP 708076	A2	19960424	EP 1995-115901	19951009 <--
EP 708076	A3	20010919		
EP 708076	B1	20030423		
R: BE, DE, ES, FR, GB, IT, NL				
ES 2196036	T3	20031216	ES 1995-115901	19951009 <--
CA 2160520	A1	19960418	CA 1995-2160520	19951013 <--

US 5616818	A	19970401	US 1995-543095	19951013	<--
JP 08208566	A	19960813	JP 1995-291687	19951016	<--
BR 9504424	A	19970520	BR 1995-4424	19951016	<--
CN 1125723	A	19960703	CN 1995-109589	19951017	<--
CN 1059667	C	20001220			

PRIORITY APPLN. INFO.: DE 1994-4437047 A 19941017
OTHER SOURCE(S): CASREACT 125:10357
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(continuous method for the dinitration of aromatic compds.)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L18 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB A review with 62 refs. Tech. and chemical aspects of the industrial nitration of toluene to mono- (MNT) and dinitrotoluene (DNT) in mixed acid are discussed. In modern mixed acid nitration plants for DNT, the spent acid from the MNT-stage is purified, reconcd., and recycled back into the nitration process. Thus the consumption of sulfuric acid per one ton of DNT is reduced to almost zero. Moreover, also the sulfuric-, nitric-, nitrous acid and MNT/DNT from the washing of the crude DNT and from the purification and reconcn. of the MNT spent acid are recovered and recycled back into nitration. By doing so not only the nitrate load of the waste water from a DNT nitration plant is reduced by 95% but also the consumption figures for nitric acid are considerably improved. More than 98% of the nitric acid needed for nitration can thus be converted to DNT.
ACCESSION NUMBER: 1996:288541 CAPLUS
DOCUMENT NUMBER: 124:320045
ORIGINAL REFERENCE NO.: 124:59293a,59296a
TITLE: Industrial nitration of toluene to dinitrotoluene. Requirements of a modern facility for the production of dinitrotoluene
AUTHOR(S): Hermann, H.; Gebauer, J.; Konieczny, P.
CORPORATE SOURCE: Josef Meissner GmbH Co., Cologne, 50968, Germany
SOURCE: ACS Symposium Series (1996), 623(Nitration), 234-249
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PREP (Preparation)

(requirements of modern facility for industrial nitration of toluene to dinitrotoluene)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L18 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB A new process, developed at Olin for manufacture of dinitrotoluene, avoids use of sulfuric acid by using high strength nitric acid to synthesize DNT, a precursor of toluene diisocyanate. The advantages of the new process include reduced raw material consumption and significantly lower capital investment for waste treatment facilities. These advantages are derived from careful control of the reaction conditions. Unwanted byproducts are minimized in the reactor and do not have to be removed in subsequent processing.
ACCESSION NUMBER: 1996:288539 CAPLUS
DOCUMENT NUMBER: 124:320067
ORIGINAL REFERENCE NO.: 124:59297a,59300a
TITLE: Commercial dinitrotoluene production process
AUTHOR(S): Quakenbush, Allen B.; Pennington, B. Timothy
CORPORATE SOURCE: Olin corp., Lake Charles, LA, 70602, USA
SOURCE: ACS Symposium Series (1996), 623(Nitration), 214-222
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PREP (Preparation)
(dinitrotoluene manufacture by nitration of toluene in presence of nitric acid only)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1— Me

2 [D1— NO_2]

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L18 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN

AB Dinitrotoluene isomer mixts., useful as TDI precursors (no data), which have reduced ortho-isomer content (e.g., 4.0-4.1%), are prepared via the 2-step nitration of PhMe with HNO3 and H2SO4 in which the second nitration step is conducted under adiabatic conditions.

ACCESSION NUMBER: 1996:254271 CAPLUS
DOCUMENT NUMBER: 124:288975
ORIGINAL REFERENCE NO.: 124:53579a,53582a
TITLE: Two-step nitration process for the preparation of dinitrotoluene isomer mixtures having reduced ortho-isomer content
INVENTOR(S): Klingler, Uwe; Schieb, Thomas; Wiechers, Gerhard; Zimmermann, Juergen
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 4 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 696571	A2	19960214	EP 1995-111996	19950731 <--
EP 696571	A3	19980610		
EP 696571	B1	20000126		
R: BE, DE, ES, FR, GB, IT, NL				
DE 4428462	A1	19960215	DE 1994-4428462	19940811 <--
ES 2144074	T3	20000601	ES 1995-111996	19950731 <--
US 5689018	A	19971118	US 1995-510803	19950803 <--
CA 2155562	A1	19960212	CA 1995-2155562	19950807 <--
CA 2155562	C	20061114		
JP 08059565	A	19960305	JP 1995-222793	19950809 <--
JP 3631814	B2	20050323		
BR 9503612	A	19960430	BR 1995-3612	19950810 <--
CN 1121507	A	19960501	CN 1995-109295	19950811 <--
CN 1075054	C	20011121		

PRIORITY APPLN. INFO.: DE 1994-4428462 A 19940811
OTHER SOURCE(S): CASREACT 124:288975
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(two-step nitration process for the preparation of dinitrotoluene isomer mixts. having reduced ortho-isomer content)

RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

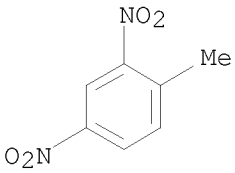
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L18 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB Replacement of H2SO4 in mixed acid aromatic nitrations by inorg. solids, with accumulation or elimination of produced water results in a fundamentally different behavior of the HNO3-solid couple. If water accumulates, HNO3 becomes a selective oxidative coupling catalyst, whereas when water is eliminated efficiently, HNO3 alone behaves as a strong nitrating agent, with increased para-selectivity as compared to the sulfo-nitric system.
ACCESSION NUMBER: 1992:23321 CAPLUS
DOCUMENT NUMBER: 116:23321
ORIGINAL REFERENCE NO.: 116:4059a,4062a
TITLE: Nitric acid associated with inorganic solids: a versatile reagent and catalyst in the chemistry of aromatics
AUTHOR(S): Gubelmann, M. H.; Doussain, C.; Tirel, P. J.; Popa, J. M.
CORPORATE SOURCE: Rhone Poulenc Rech., Saint Fons, F-69192, Fr.
SOURCE: Studies in Surface Science and Catalysis (1991), 59(Heterog. Catal. Fine Chem. 2), 471-8
CODEN: SSCTDM; ISSN: 0167-2991
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 25321-14-6P, Dinitrotoluene
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, during toluene nitration)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

IT 121-14-2P, 2,4-Dinitrotoluene
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of, by nitrotoluene nitration, selective catalysts for)
RN 121-14-2 CAPLUS
CN Benzene, 1-methyl-2,4-dinitro- (CA INDEX NAME)



L18 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB (O2N)2C6H3Me (I), useful as intermediate for tolylene diisocyanate, is prepared by liquid-phase nitration of MePh in the absence of H2SO4 and phase separation by an alkali or alkaline earth nitrate salt. MePh was added to 9 mol
equiv 98% HNO3 at 70° to complete the nitration in 4 min, Mg(NO3)2.6H2O was added to sep. the lighter phase containing I from the heavy phase containing HNO3/Mg(NO3)2. This process avoids using H2SO4 during nitration which results in process simplification and economy.

ACCESSION NUMBER: 1991:408280 CAPLUS
DOCUMENT NUMBER: 115:8280
ORIGINAL REFERENCE NO.: 115:1609a,1612a
TITLE: Process for the production of dinitrotoluene
INVENTOR(S): Mason, Robert W.
PATENT ASSIGNEE(S): Olin Corp., USA
SOURCE: U.S., 3 pp. Cont-in-part of U.S. Ser. No. 210,549.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5001272	A	19910319	US 1989-402322	19890905 <--
CA 1340073	C	19981006	CA 1989-603642	19890622 <--
CA 2008342	A1	19910723	CA 1990-2008342	19900123 <--
IN 177244	A1	19961214	IN 1990-DE77	19900130 <--
CN 1054247	A	19910904	CN 1990-100885	19900222 <--
CN 1026583	C	19941116		

PRIORITY APPLN. INFO.: US 1988-210549 A2 19880622

IT 25321-14-6P, Dinitrotoluene
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate or toluene diisocyanate)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB A continuous method of mixing acid for cascade of nitrators is proposed. At the beginning, some of the nitrators in the cascade are empty, and the others are filled with acid of concentration Ci(initial acid concentration in the ith nitrator). Acid of concentration Cβ is fed continuously into the 1st nitrator. While the last one is full, concentration in every nitrator would be as desired. During this process, the acid with different concentration mixes inside the 1st one and flows into the 2nd, etc. A math. model of this process is studied, so has the searching technique for optimum operation parameters Cβ, Co and dimensionless time. The method is accurate, fast, and easily carried out. It can be used for any kind of cascade of reactors.
ACCESSION NUMBER: 1990:634205 CAPLUS
DOCUMENT NUMBER: 113:234205
ORIGINAL REFERENCE NO.: 113:39483a,39486a
TITLE: Continuous method of mixing acid and its mathematical model for TNT manufacture
AUTHOR(S): Hu, Shaoming
CORPORATE SOURCE: Xian Mod. Chem. Res. Inst., Xian, 710061, Peop. Rep. China
SOURCE: Proceedings of the International Pyrotechnics Seminar (1990), 15th, 421-6
CODEN: PPYSD7; ISSN: 0270-1898
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 25321-14-6P, Dinitrotoluene
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(nitration of, mixed acid in, preparation of)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1— Me

2 [D1— NO_2]

L18 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB The process for the recovery of HNO3 in the spent acid phase from a mixed acid mononitration reaction comprises, (a) adding sufficient amount of HNO3 to provide at least .apprx.2 weight% HNO3 concentration in the spent acid phase from the mononitration reaction, and (b) adiabatically reacting a mononitroarom. hydrocarbon in greater than a stoichiometric amount with the HNO3 in the spent acid phase to afford a dinitroarom. hydrocarbon product and a HNO3 concentration of less than <0.25 weight% in the spent acid phase. The above recovery process was used in the preparation of dinitrotoluenes from toluene and HNO3 and H2SO4.
ACCESSION NUMBER: 1985:166450 CAPLUS
DOCUMENT NUMBER: 102:166450
ORIGINAL REFERENCE NO.: 102:26161a,26164a
TITLE: Nitric acid recovery by the adiabatic nitration of nitro aromatics with fortified spent acid
INVENTOR(S): Carr, Richard V. C.
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4496782	A	19850129	US 1983-512289	19830708 <--

PRIORITY APPLN. INFO.: US 1983-512289 19830708
OTHER SOURCE(S): MARPAT 102:166450
IT 25321-14-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, from toluene by nitration with nitric acid-sulfuric acid, nitric acid recovery in relation to)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB The manufacture of dinitrotoluene by nitration of toluene with HNO3-H2SO4 was improved by (1) contacting the spent nitrating acid mixture with an oxidizing or a reducing agent to remove contaminant HNO2, and (2) contacting the HNO2-free spent acid from step 1 with PhMe to remove residual HNO3 leaving a mixture consisting essentially of H2SO4 and organic contaminants.
ACCESSION NUMBER: 1981:208522 CAPLUS
DOCUMENT NUMBER: 94:208522
ORIGINAL REFERENCE NO.: 94:34099a,34102a
TITLE: Refining aqueous acid mixtures utilized in nitration of aromatics
INVENTOR(S): Milligan, Barton; Huang, Der-Shing
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4257986	A	19810324	US 1979-8906	19790202 <--

PRIORITY APPLN. INFO.: US 1979-8906 19790202
IT 25321-14-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by nitration of toluene with sulfuric acid-nitric acid, refining of spent acid mixture in)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L18 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB Using CH_2Cl_2 as a solvent in the nitration of aromatic compds. with NHO_3-H_2SO_4 (1) made the reaction conditions uniform, (2) extracted undegraded product efficiently without dilution of the nitrating mixture, (3) reduced the consumption of HNO_3, (4) allowed recycle of H_2SO_4 with min fortification, and (5) improved the yield. E.g., mononitration of C_6H_6 without CH_2Cl_2 required 4 mol excess HNO_3 and gave 98% yield; with CH_2Cl_2 as solvent only 1 mol excess HNO_3 gave >99% yield. About 18 aromatic compds. including xylene, PhCN, Ph_2CO, naphthalene, and acenaphthene were mono- or dinitrated by this method. CH_2Cl_2 was the solvent for preparation of nitronium hydrogen disulfate from HNO_3 and SO_3.
ACCESSION NUMBER: 1978:6463 CAPLUS
DOCUMENT NUMBER: 88:6463
ORIGINAL REFERENCE NO.: 88:1089a,1092a
TITLE: Synthetic housekeeping - nitration
AUTHOR(S): Davis, Gary; Cook, Newell
CORPORATE SOURCE: Res. Dev. Cent., Gen. Electr. Co., Schenectady, NY, USA
SOURCE: CHEMTECH (1977), 7(10), 626-9
CODEN: CHTEDD; ISSN: 0009-2703
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 25321-14-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

L18 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2009 ACS on STN
AB Aromatic hydrocarbons are treated with HNO3-H2SO4 mixts. in emulsions to give nitrated aromatics and the same acid-free nitrated aromatics are added to the emulsions to sep. the nitrated aromatics. Thus, mononitrotoluene is introduced into an apparatus at 100 parts/hr., a mixture containing 70 weight % H2SO4 and 30 weight % HNO3 introduced at 110 parts/hr., the mixture agitated to give an emulsion, and 14.3 parts acid-free dinitrotoluene added to sep. the emulsion.
ACCESSION NUMBER: 1968:95504 CAPLUS
DOCUMENT NUMBER: 68:95504
ORIGINAL REFERENCE NO.: 68:18395a,18398a
TITLE: Emulsion separation of aromatic nitro compounds
INVENTOR(S): Menke, William K.
PATENT ASSIGNEE(S): Mobay Chemical Co.
SOURCE: U.S., 2 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3350466		19671031	US 1966-555282	19660606 <--

IT 25321-14-6P
RL: PREP (Preparation)
(manufacture of, separation from emulsion with nitric and sulfuric acids in)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

=> e johannes buttner/in
E1 1 JOHANNES ARNO/IN
E2 1 JOHANNES BARTH/IN
E3 0 --> JOHANNES BUTTNER/IN
E4 1 JOHANNES CAROL ADOLF MAZGAREANU/IN
E5 3 JOHANNES CHARLES/IN
E6 1 JOHANNES CHARLES W/IN
E7 1 JOHANNES CONRAD/IN
E8 1 JOHANNES DAMHUIS EDUARD HENDRIKUS/IN

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E9           1     JOHANNES DANA B JR/IN
E10          2     JOHANNES DEN BRANDT ADRIANUS H/IN
E11          1     JOHANNES DERICK RAYMOND/IN
E12         10     JOHANNES DIETER/IN

=> e buttner johannes/in
E1           1     BUTTNER HENRY F/IN
E2           1     BUTTNER HILDEGARD/IN
E3           1 --> BUTTNER JOHANNES/IN
E4           2     BUTTNER JUSTIN D/IN
E5           6     BUTTNER KLAUS/IN
E6           1     BUTTNER MARK D/IN
E7           3     BUTTNER MARK JEREMY/IN
E8           2     BUTTNER MARK P/IN
E9           1     BUTTNER MATHIAS/IN
E10          1     BUTTNER MAX/IN
E11          5     BUTTNER PETER/IN
E12          1     BUTTNER REINER/IN

=> s e3
L19          1 "BUTTNER JOHANNES"/IN

=> e mackenroth wolfgang/in
E1           4     MACKENROTH CHRISTIANE/IN
E2           1     MACKENROTH JOSEPH R/IN
E3          28 --> MACKENROTH WOLFGANG/IN
E4           6     MACKENS UWE/IN
E5           2     MACKENSEN A W/IN
E6           2     MACKENSEN ANDREAS/IN
E7           1     MACKENSEN EDER SUSANNE/IN
E8           1     MACKENSEN HERBERT/IN
E9           6     MACKENSEN KLAUS/IN
E10          1     MACKENSEN OTTO/IN
E11          1     MACKENSEN WARREN J/IN
E12          1     MACKENSIE PHILIP W/IN

=> s e3
L20         28 "MACKENROTH WOLFGANG"/IN

=> e hermann heinrich/in
E1           4     HERMANN HARTI/IN
E2           1     HERMANN HEIDO/IN
E3          13 --> HERMANN HEINRICH/IN
E4           1     HERMANN HEINZ/IN
E5           1     HERMANN HEINZ GUENTER/IN
E6           7     HERMANN HELMUT/IN
E7           4     HERMANN HELMUTH/IN
E8           1     HERMANN HENRY/IN
E9           2     HERMANN HERBERT/IN
E10          1     HERMANN HILDEGARD/IN
E11          2     HERMANN HOLGER/IN
E12          9     HERMANN HOLGER LARS/IN

=> s e3
L21         13 "HERMANN HEINRICH"/IN

=> e konieczny peter/in
E1           4     KONIECZNY MIECZYSLAW/IN
E2           2     KONIECZNY PAWEL/IN
E3           4 --> KONIECZNY PETER/IN
E4           5     KONIECZNY STANISLAW/IN
E5           5     KONIECZNY TADEUSZ/IN
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E6           2     KONIECZNY WILFRIED/IN
E7           1     KONIECZNY WITOLD/IN
E8           1     KONIECZNY ZBIGNIEW/IN
E9           1     KONIECZNY ZENON/IN
E10          1     KONIECZNY ZYGMUNT/IN
E11          1     KONIECZUY PETER/IN
E12          1     KONIECZY DONALD L/IN

=> s e3
L22          4 "KONIECZNY PETER"/IN

=> e gebauer jurgen/in
E1           1     GEBAUER JULIS/IN
E2           6     GEBAUER JURAJ/IN
E3           0 --> GEBAUER JURGEN/IN
E4           1     GEBAUER K/IN
E5           1     GEBAUER KAREL/IN
E6          12     GEBAUER KARL/IN
E7           1     GEBAUER KATHRIN/IN
E8          15     GEBAUER KLAUS/IN
E9           1     GEBAUER KLAUS HEINRICH/IN
E10          1     GEBAUER KLAUS PETER DIPL ING/IN
E11         11     GEBAUER LUDWIG/IN
E12          1     GEBAUER M/IN

=> e gebauer j/in
E1           4     GEBAUER HORST/IN
E2           2     GEBAUER INGO/IN
E3           1 --> GEBAUER J/IN
E4           1     GEBAUER JAN/IN
E5           3     GEBAUER JOZSEF/IN
E6           5     GEBAUER JUERGEN/IN
E7           1     GEBAUER JULIS/IN
E8           6     GEBAUER JURAJ/IN
E9           1     GEBAUER K/IN
E10          1     GEBAUER KAREL/IN
E11         12     GEBAUER KARL/IN
E12          1     GEBAUER KATHRIN/IN

=> s e5 and e3
             3 "GEBAUER JOZSEF"/IN
             1 "GEBAUER J"/IN
L23          0 "GEBAUER JOZSEF"/IN AND "GEBAUER J"/IN

=> d his

     (FILE 'HOME' ENTERED AT 13:12:34 ON 12 AUG 2009)

     FILE 'CAPLUS' ENTERED AT 13:12:49 ON 12 AUG 2009
L1             1 S US20080242900/PN

     FILE 'REGISTRY' ENTERED AT 13:13:10 ON 12 AUG 2009

     FILE 'CAPLUS' ENTERED AT 13:13:18 ON 12 AUG 2009
L2               TRA L1 1- RN :        8 TERMS

     FILE 'REGISTRY' ENTERED AT 13:13:18 ON 12 AUG 2009
L3             8 SEA L2

     FILE 'CAPLUS' ENTERED AT 13:16:12 ON 12 AUG 2009

     FILE 'REGISTRY' ENTERED AT 13:16:19 ON 12 AUG 2009
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L4            0 S 121-14-3
L5            1 S 121-14-2
L6            1 S 606-20-2
L7            1 S 25321-14-6
L8            1 S 1321-12-6

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 12 AUG 2009
L9          209 S L5/PREP
L10         123 S L6/PREP
L11         151 S L7/PREP
L12         368 S L9 OR L10 OR L11
L13         368 DUP REMOV L12 (0 DUPLICATES REMOVED)
L14         368 S L13
L15         153 S L13 AND L7
L16          49 S L15 AND NITRIC
L17          32 S L16 AND SULFURIC
L18          24 S L17 AND PY<=2005
                E JOHANNES BUTTNER/IN
                E BUTTNER JOHANNES/IN
L19           1 S E3
                E MACKENROTH WOLFGANG/IN
L20          28 S E3
                E HERMANN HEINRICH/IN
L21          13 S E3
                E KONIECZNY PETER/IN
L22           4 S E3
                E GEBAUER JURGEN/IN
                E GEBAUER J/IN
L23           0 S E5 AND E3

=> s e5 or e3
             3 "GEBAUER JOZSEF"/IN
             1 "GEBAUER J"/IN
L24          4 "GEBAUER JOZSEF"/IN OR "GEBAUER J"/IN

=> s l19 or l20 or l21 or l22 or l24
L25         46 L19 OR L20 OR L21 OR L22 OR L24

=> s l25 and (L5 or l6 or l7)
          3338 L5
          1621 L6
          1142 L7
L26          8 L25 AND (L5 OR L6 OR L7)

=> d l26 abs ibib hitstr 1-
YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

L26  ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2009 ACS on STN
AB   The invention relates to a process for treating wastewaters by the
     nitration of aromatic compds. to give mono-, di- and trinitroaroms. which
     have a pH of 7-13 by heating the wastewaters to temps. of 150 to 350
     °C at a pressure of 10-300 bar to achieve thermolysis,
     characterized in that, before the heating, the nitroarom. compds. which do
     not contain a hydroxyl group, dissolved in these wastewaters, are removed
     from the wastewaters by extraction
ACCESSION NUMBER:        2009:258546  CAPLUS
DOCUMENT NUMBER:         150:289599
TITLE:                   Process for treating nitration wastewaters
INVENTOR(S):             Fritz, Ruediger; Buettner, Johannes; Zoellinger,
                         Michael; Merten, Anne-Kathrin; Hendel, Harald;
                         Hermann, Heinrich; Haendel, Mirko; Gebauer,
                         Hans-Juergen
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PATENT ASSIGNEE(S): BASF SE, Germany
SOURCE: PCT Int. Appl., 16pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009027416	A1	20090305	WO 2008-EP61185	20080827

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2007-115290 A 20070830

IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); REM (Removal or disposal); PREP (Preparation); PROC (Process)
(process for treating nitration wastewaters by stripping followed by thermolysis)

RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
AB A method for manufacture aromatic amines from nitroarom. comprises hydrogenating nitrocompounds in the presence of a catalyst containing 0.01 - 5 weight% an active component such as Ni, Pd and ≥1 other metal such as Co, Fe (or other metals) supported on an activated carbon, carbon black, graphite or metal oxides. Thus, a catalyst containing 0.80 weight% Pd, 13 weight% Ni and 0.93 weight% Sn supported on an activated carbon (Norit SX+) was used for manufacture toluenediamine by hydrogenating dinitrotoluene in a 300 mL reactor at 180° and H2 pressure 25 bar with selectivity 98.47%.
ACCESSION NUMBER: 2008:1397920 CAPLUS

DOCUMENT NUMBER: 149:578105
TITLE: Method for producing amines by catalytic hydrogenating nitrocompounds
INVENTOR(S): Coelho Tsou, Joana; Schwab, Ekkehard; Kubanek, Petr; Mackenroth, Wolfgang; Oehlenschlaeger, Steffen; Voss, Hartwig; Neto, Samuel
PATENT ASSIGNEE(S): Basf Se, Germany
SOURCE: PCT Int. Appl., 17pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008138784	A1	20081120	WO 2008-EP55447	20080505

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2007-107893 A 20070510
IT 25321-14-6, Dinitrotoluene
RL: RCT (Reactant); RACT (Reactant or reagent)
(producing aromatic amines by catalytic hydrogenating nitrocompounds)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
AB Aromatic amines are prepared by catalytic hydrogenation of the appropriate nitro compds., e.g., toluene diamine produced by hydrogenation of dinitrotoluene, wherein the hydrogenation catalysts comprise a mixture of platinum, nickel and an addnl. metal and a carrier.
ACCESSION NUMBER: 2007:223999 CAPLUS
DOCUMENT NUMBER: 146:276465
TITLE: Production of aromatic amines by catalytic

hydrogenation of nitro compounds
INVENTOR(S): Kubanek, Petr; Schwab, Ekkehard; Van Laar, Frederik; Mackenroth, Wolfgang
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 9pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102005041532	A1	20070301	DE 2005-102005041532	20050831
WO 2007025884	A1	20070308	WO 2006-EP65478	20060821
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1924355	A1	20080528	EP 2006-778285	20060821
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2009506091	T	20090212	JP 2008-528464	20060821
CN 101252987	A	20080827	CN 2006-80031556	20080228
US 20080242537	A1	20081002	US 2008-65285	20080229
KR 2008040021	A	20080507	KR 2008-706946	20080321
IN 2008CN01585	A	20081128	IN 2008-CN1585	20080331

PRIORITY APPLN. INFO.: DE 2005-102005041532A 20050831
WO 2006-EP65478 W 20060821

OTHER SOURCE(S): CASREACT 146:276465
IT 25321-14-6, Dinitrotoluene
RL: RCT (Reactant); RACT (Reactant or reagent)
(production of aromatic amines by catalytic hydrogenation of nitro compds.)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

L26 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
AB A method for producing dinitrotoluene comprises: (A) the nitration of

toluene with nitric acid in the presence of sulfuric acid to give nitrotoluene; (B) separating the reaction product of step (A) into a nitrotoluene-containing organic phase and a sulfuric acid-containing aqueous phase; (C) nitrating the nitrotoluene-containing organic phase with nitric acid in the presence of sulfuric acid to give dinitrotoluene; and (D) separating the reaction product of step (C) into a dinitrotoluene-containing organic phase and a sulfuric-acid containing aqueous phase. The reaction product of step (A) contains 3.0-8% of toluene, in relation to the organic phase, and 0.1-1.2% of nitric acid, in relation to the aqueous phase and the phase separation of step (B) is carried out in such a manner that further reaction of toluene with nitric acid is prevented. Process flow diagrams are presented.

ACCESSION NUMBER: 2005:811729 CAPLUS
DOCUMENT NUMBER: 143:213353
TITLE: Two-stage nitration method for producing dinitrotoluene from toluene
INVENTOR(S): Buettner, Johannes; MacKenroth, Wolfgang; Hermann, Heinrich; Konieczny, Peter; Gebauer, Juergen
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005075407	A1	20050818	WO 2005-EP1017	20050202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 102004005913	A1	20050825	DE 2004-102004005913	20040205
EP 1713756	A1	20061025	EP 2005-701305	20050202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1918109	A	20070221	CN 2005-80004228	20050202
BR 2005007293	A	20070703	BR 2005-7293	20050202
JP 2007520512	T	20070726	JP 2006-551789	20050202
US 20080242900	A1	20081002	US 2006-586683	20060720
ZA 2006007374	A	20080625	ZA 2006-7374	20060904
KR 2006130203	A	20061218	KR 2006-718074	20060905
IN 2006CN03216	A	20070706	IN 2006-CN3216	20060905

PRIORITY APPLN. INFO.: DE 2004-102004005913A 20040205
WO 2005-EP1017 W 20050202

OTHER SOURCE(S): CASREACT 143:213353

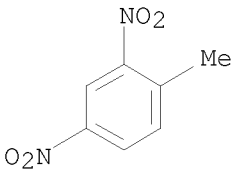
IT 25321-14-6P, Dinitrotoluene
RL: EPR (Engineering process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
(two-stage nitration method for producing dinitrotoluene from toluene)

RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

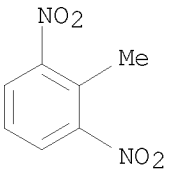
D1—Me

2 [D1—NO_2]

IT 121-14-2P, 2,4-Dinitrotoluene 606-20-2P, 2,6-Dinitrotoluene
RL: SPN (Synthetic preparation); PREP (Preparation)
(two-stage nitration method for producing dinitrotoluene from toluene)
RN 121-14-2 CAPLUS
CN Benzene, 1-methyl-2,4-dinitro- (CA INDEX NAME)



RN 606-20-2 CAPLUS
CN Benzene, 2-methyl-1,3-dinitro- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
AB A method is described for the production of aromatic amines (e.g., diaminotoluenes) from aromatic nitro compds. (e.g., dinitrotoluenes) in the presence of supported (e.g., activated carbon) nickel-platinum alloy hydrogenation catalysts with the atomic ratio between nickel and platinum in the alloy ranging between 30:70 and 70:30, resp.
ACCESSION NUMBER: 2005:371208 CAPLUS
DOCUMENT NUMBER: 142:431969
TITLE: Method for the production of aromatic amines from aromatic nitro compounds in the presence of supported nickel-platinum alloy hydrogenation catalysts

INVENTOR(S): Van Laar, Frederik; Schwab, Ekkehard; Oehlenschlaeger, Steffen; Voss, Hartwig; Mackenroth, Wolfgang ; Morgenschweis, Konrad; Penzel, Ulrich; Weidner, Bernd
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037768	A1	20050428	WO 2004-EP11642	20041015
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10349095	A1	20050519	DE 2003-10349095	20031017
EP 1678118	A1	20060712	EP 2004-790484	20041015
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1867538	A	20061122	CN 2004-80030516	20041015
CN 100364957	C	20080130		
JP 2007508348	T	20070405	JP 2006-534705	20041015
US 20070149814	A1	20070628	US 2006-575924	20060414
KR 2007007762	A	20070116	KR 2006-708988	20060509
US 20080177111	A1	20080724	US 2008-57617	20080328
US 7468461	B2	20081223		

PRIORITY APPLN. INFO.:
DE 2003-10349095 A 20031017
WO 2004-EP11642 W 20041015
US 2006-575924 A3 20060414

OTHER SOURCE(S): CASREACT 142:431969

IT 25321-14-6, Dinitrotoluene
RL: RCT (Reactant); RACT (Reactant or reagent)
(method for production of aromatic amines from aromatic nitro compds. in presence of supported nickel-platinum alloy hydrogenation catalysts)

RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention relates to a method for producing amines by catalytically hydrogenating nitroaroms. and then separating the catalysts from the reaction mixture containing at least one aromatic amine and water. According to the inventive method, the catalysts are separated by means of membrane filtration which is carried out at a pressure of 5 to 50 bar on the side of the suspension, a difference in pressure between the side of the suspension and the side of the permeate of at least 0.3 bar, and a flow rate of 1 to 6 m/s on the side of the suspension.

ACCESSION NUMBER: 2003:633639 CAPLUS
DOCUMENT NUMBER: 139:179876
TITLE: Catalyst separation in the production of aromatic amines
INVENTOR(S): Vanoppen, Dominic; Schwab, Ekkehard; Van Laar, Frederik; Voss, Hartwig; Oehlenschlaeger, Steffen; Mackenroth, Wolfgang; Morgenschweis, Konrad; Penzel, Ulrich; Weidner, Bernd
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066571	A1	20030814	WO 2003-EP924	20030130
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003218967	A1	20030902	AU 2003-218967	20030130
EP 1474378	A1	20041110	EP 2003-714720	20030130
EP 1474378	B1	20050907		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1628091	A	20050615	CN 2003-803309	20030130

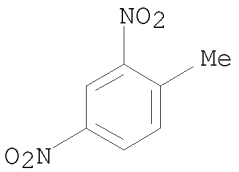
CN 1312108	C	20070425			
AT 303984	T	20050915	AT 2003-714720		20030130
JP 2006508017	T	20060309	JP 2003-565946		20030130
US 20050177003	A1	20050811	US 2004-500862		20040720
US 7091383	B2	20060815			
PRIORITY APPLN. INFO.:			DE 2002-10204700	A	20020206
			WO 2003-EP924	W	20030130

OTHER SOURCE(S): CASREACT 139:179876

IT 121-14-2, 2,4-Dinitrotoluene
RL: RCT (Reactant); RACT (Reactant or reagent)
(catalyst separation in the production of aromatic amines)

RN 121-14-2 CAPLUS

CN Benzene, 1-methyl-2,4-dinitro- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

AB Aromatic nitro compds. in wastewaters are decomposed at pH 7-14 and 150-350° at 10-300 bar when ≥1 of the nitro compds. does not have a hydroxyl group on the aromatic ring. The method is suitable for treating wastewaters from manufacture of nitrobenzene, nitrotoluene, and dinitrotoluene.

ACCESSION NUMBER: 1999:667832 CAPLUS
DOCUMENT NUMBER: 131:262071
TITLE: Method for decomposition of aromatic nitro compounds in wastewaters
INVENTOR(S): Papkalla, Thomas; Baur, Karl Gerhard; Langensiepen, Hans-Werner; Mackenroth, Wolfgang
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19815844	A1	19991014	DE 1998-19815844	19980408
EP 953546	A2	19991103	EP 1999-106138	19990406
EP 953546	A3	20000202		
EP 953546	B1	20040922		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11319800	A	19991124	JP 1999-98946	19990406
CN 1231997	A	19991020	CN 1999-106294	19990408
CN 1170776	C	20041013		
PRIORITY APPLN. INFO.:			DE 1998-19815844	A 19980408

IT 25321-14-6, Dinitrotoluene
RL: MSC (Miscellaneous); REM (Removal or disposal); PROC (Process)
(method for decomposition of aromatic nitro compds. in wastewaters)

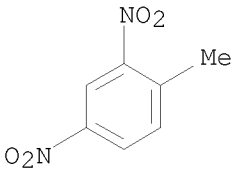
RN 25321-14-6 CAPLUS

CN Benzene, methyldinitro- (CA INDEX NAME)

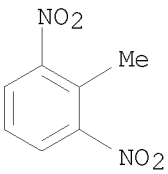
D1—Me

2 [D1—NO_2]

IT 121-14-2, 2,4-Dinitrotoluene 606-20-2, 2,6-Dinitrotoluene
RL: REM (Removal or disposal); PROC (Process)
(method for decomposition of aromatic nitro compds. in wastewaters)
RN 121-14-2 CAPLUS
CN Benzene, 1-methyl-2,4-dinitro- (CA INDEX NAME)



RN 606-20-2 CAPLUS
CN Benzene, 2-methyl-1,3-dinitro- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
AB Crude dinitrotoluene from nitration of toluene or mononitrotoluene, after separation of nitrating acid, is extracted with a countercurrent stream of dilute aqueous solution of HNO3, H2SO4 and HNO2 in a multistage process where the volume ratio of dinitrotoluene to aqueous solution is 1:3 to 10:1, and the aqueous extract is recycled to the nitrating process, directly or after concentration (e.g., to 65% HNO3). Approx. 98% of the HNO3 and HNO2 in the crude dinitrotoluene are removed.
ACCESSION NUMBER: 1996:676109 CAPLUS

DOCUMENT NUMBER: 125:304516
ORIGINAL REFERENCE NO.: 125:56913a,56916a
TITLE: Nitric acid, sulfuric acid and nitrous acid removal, recovery and recycling in nitrating of toluene or mononitrotoluene
INVENTOR(S): Hermann, Heinrich; Gebauer, Juergen
PATENT ASSIGNEE(S): Josef Meissner Gmbh & Co., Germany
SOURCE: Eur. Pat. Appl., 6 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 736514	A1	19961009	EP 1996-104233	19960316
EP 736514	B1	20010620		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, PT, SE				
DE 19512114	A1	19961010	DE 1995-19512114	19950404
DE 19512114	C2	20000427		
US 5756867	A	19980526	US 1995-529100	19950915
AT 202333	T	20010715	AT 1996-104233	19960316
IN 187139	A1	20020209	IN 1996-CA475	19960318
CA 2173381	A1	19961005	CA 1996-2173381	19960403
CA 2173381	C	20070626		
CN 1145893	A	19970326	CN 1996-105960	19960403
CN 1085656	C	20020529		
PL 187688	B1	20040930	PL 1996-313631	19960404

PRIORITY APPLN. INFO.: DE 1995-19512114 A 19950404
IT 25321-14-6P, Dinitrotoluene
RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP (Preparation)
(nitric acid, sulfuric acid and nitrous acid removal, recovery and recycling in nitrating of toluene or mononitrotoluene)
RN 25321-14-6 CAPLUS
CN Benzene, methyldinitro- (CA INDEX NAME)

D1—Me

2 [D1—NO_2]

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y

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     FILE 'REGISTRY' ENTERED AT 13:13:18 ON 12 AUG 2009
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                 D L3 1-

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     FILE 'REGISTRY' ENTERED AT 13:16:19 ON 12 AUG 2009
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                 D
L6             1 SEA FILE=REGISTRY SPE=ON  PLU=ON  606-20-2
                 D
L7             1 SEA FILE=REGISTRY SPE=ON  PLU=ON  25321-14-6
                 D
L8             1 SEA FILE=REGISTRY SPE=ON  PLU=ON  1321-12-6
                 D

     FILE 'CAPLUS' ENTERED AT 13:17:37 ON 12 AUG 2009
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L10          123 SEA FILE=CAPLUS SPE=ON  PLU=ON  L6/PREP
L11          151 SEA FILE=CAPLUS SPE=ON  PLU=ON  L7/PREP
L12          368 SEA FILE=CAPLUS SPE=ON  PLU=ON  L9 OR L10 OR L11
L13          368 DUP REMOV L12 (0 DUPLICATES REMOVED)
L*** DEL     368 S L9 OR L10 OR L11
L*** DEL     368 S L9 OR L10 OR L11
L14          368 SEA FILE=CAPLUS L13
L15          153 SEA FILE=CAPLUS SPE=ON  PLU=ON  L14 AND L7
L16           49 SEA FILE=CAPLUS SPE=ON  PLU=ON  L15 AND NITRIC
L17           32 SEA FILE=CAPLUS SPE=ON  PLU=ON  L16 AND SULFURIC
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                 E JOHANNES BUTTNER/IN
                 E BUTTNER JOHANNES/IN
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                 E MACKENROTH WOLFGANG/IN
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                 E HERMANN HEINRICH/IN
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                 E KONIECZNY PETER/IN
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                 E GEBAUER J/IN
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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
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	ENTRY	SESSION
FULL ESTIMATED COST	218.34	273.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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STN INTERNATIONAL LOGOFF AT 13:25:38 ON 12 AUG 2009